

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,009		10/25/2000	Bruce L. Davis	60319	4530
23735	7590	05/24/2006		EXAMINER	
DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008				JANVIER, JEAN D	
				ART UNIT	PAPER NUMBER
,				3622	<del></del>
				DATE MAILED: 05/24/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

# **MAILED**

MAY 2 4 2006

**GROUP 3600** 

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/697,009 Filing Date: October 25, 2000 Appellant(s): DAVIS ET AL.

William Y. Conwell For Appellant

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed on March 16, 2006 appealing from the Office action mailed on January 31, 2005.

# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The Examiner is not aware of any related appeals, interferences or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct. However, contrary to the Appellant's remarks, the restriction was made final as featured in the last Final Office Action mailed on 10/21/2003. Hence, claim 3 was supposed to be canceled by the Appellant. Furthermore, regarding the IDS, filed on 09/15/03, the Examiner had considered or initialed the PTO Form 1449 except for the NPL documents, which were not submitted with the Application because they were filed with the parent Application. The Examiner had unsuccessfully contacted the Examiner who worked on the parent Application. However, the Examiner stated that he was no longer in possession of those documents and that he was promoted to a SPE and no longer dealt with examination or prosecution of applications per se. The Examiner of record had shared the latter information with the Appellant and had requested that the Appellant submit new copies of those documents if he wants them to be considered by the Office. Since the Appellant never provided those documents, as requested by the Examiner, the Examiner could not consider them. It appears here that the Appellant is no

Art Unit: 3622

longer in possession of the said documents and wants the Examiner to improperly and unlawfully consider them anyway, without checking or reading them for relevant disclosure, because they were originally submitted with a parent Application.

#### (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

## (6) Grounds of Rejection to be reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

# (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemon, US Patent 4, 674, 041.

(Here, the digital watermark on the object, as presented in claims 2 and 5, will be given patentable weight, as intended))

As per claim 2 and 5-7, Lemon discloses a system having remotely located coupon printing stations installed in stores and capable of limiting the number of coupons printed in a given time period. Each coupon station has a display for indicating the available coupons, selection means to allow a consumer to choose the desired coupon and a coupon printer coupled to a station (T) for

expiration dates (col. 1: 55-67).

printing the selected coupon. The system also disables display of a particular coupon when a preselected coupon limit has been reached (col. 2: 16-19; col. 3: 39-54; col. 4: 47-51). The manufacturer may prescribe a particular number of coupons to be redeemed collectively and at each particular retail

store. The present invention also greatly reduces the possibility of <u>fraud</u> by enabling coupons to be encoded with store <u>identification</u> numbers, expiration dates, uniform product codes, and other information at the point of distribution. The system provides point of sale distribution and same day

The system includes a stand-alone coupon-dispensing terminal T or kiosk provided at each retail store or location. Each stand-alone terminal communicates with a host central processing unit located remote from the stores (remote central repository or database storing coupon data). Coupons are displayed for customer selection at each dispensing terminal on a video menu via a cathode ray tube and touch screen combination. Each terminal may be monitored and controlled via the host computer to obtain data such as the number of coupons issued and the <u>identification</u> of customers using the terminal. The system enables the manufacturer to limit the number of a particular coupon issued from a terminal at a store as well as the number issued in response to activation by a particular credit <u>card</u>.

Each terminal T, linked to the remote central database, includes a self contained high speed coupon printer, which prints the product information, date, time of day, uniform product code, expiration date, a store <u>identification</u> number or any other information desired for particular applications on each coupon issued. Each terminal T has at least a reader device capable of reading a magnetic strip on a credit card (col. 2: 5-28). A host computer H, related to the central database, is programmed to receive from a plurality of terminals T, installed at a plurality of stores, coupon transaction information including the number and type of coupons dispensed, store <u>identification</u>

numbers, and customer account numbers. Host computer H is programmed to use the information to generate the weekly reports 4 and 6, shown in fig. 1, for the manufacturer and related retailers respectively (col. 4: 5264). Hence, the manufacturer is able to prescribe limits for distribution of particular coupons on a collective and per store basis, as depicted fig. 1. The report 4 is provided to the manufacturer on a periodic basis, such as a weekly basis and includes coupon distribution information for each retail outlet. Report 4 may include the number of coupons dispensed, the store identification information, the dates and times of distribution, and customer identification data. This information is valuable to the manufacturer both as an aid in analyzing its marketing techniques and in detecting fraudulent coupon distribution or redemption. The report 6 provided to retailers is essentially like report 4 but includes information only as to the particular retail store(s) involved (col. 3: 39-54; fig. 1).

A customer enters a participating store having a terminal T, with a reader or Activator A coupled thereto, and uses an identification means such as a typical credit card to activate or access via the Activator A the coupon dispenser or terminal T (first location) to view or select at least one coupon. Upon detecting or sensing the presence of the credit card in its circuitry, Activator A reads the data encoded on magnetic tape or strip imprinted on the consumer's inserted <u>credit card</u>. Then, Activator A provides a signal to activate terminal T to the coupon-dispensing mode. Using a <u>credit card</u> as an activator or identification means provides the informational capability to limit the number of unauthorized transactions or printed coupons, utilizing the same credit card at the same terminal T, and further prevents children from activating the machine or coupon dispenser T. Subsequently, terminal T, at the first location, retrieves and displays only coupons currently

Art Unit: 3622

available to the identified consumer, identified via the credit card having a unique account number or identifier. Here, the customer can select and print at least one coupon via a printer connected to the terminal T (presenting the customer's credit card or object to a first reader device at a first location or terminal T installed at a first store and triggering a first response or issue a first coupon to the customer).

Further, upon activation, terminal T determines whether the same credit card account number has been used within the last week or other pre-designated period by comparing the present credit card number with those stored in memory or database coupled to processor 22 of the terminal T. If so, microcomputer 22 permits only those coupons still available for selection by that particular customer account number to be displayed. If, for example, the manufacturer has prescribed a one per customer limit for a coupon, and that coupon has been previously issued to the customer under the same credit card account number, then the coupon will not be displayed. Furthermore, even if the particular credit account number has no selection history and if the maximum number of a particular coupon either collectively or on a store-by-store basis has been issued, that coupon will no longer be displayed. In this fashion, a manufacturer is provided with much more control over the maximum redemption liability. It should be recognized here that the customer comes to the (first) store and presents his credit card or object to a first reader device or Activator A, coupled to a first terminal T or kiosk, which senses the card and reads the customer's account number and issues a first response or a first coupon accordingly. Then the customer takes the issued or printed coupon to the cashier at the first store and uses the same object or credit card to identify himself, during the transaction, to thereby trigger a second response or a redemption of the coupon and/or to simply pay for the

transaction, which involves the redemption of the coupon upon acquiring or purchasing the required product (sensing the same object at the first store checkout or cash register reader or second reader and triggering a second response or a redemption process or a payment process). It should further be understood that the customer can subsequently take the same object or credit card to a second store or POS and present it to a second reader device or Activator A, coupled to a second and different terminal T or kiosk, which senses the card and reads the customer's account number and issues a second different response or a second different coupon, different from the first response or the first coupon issued at the first store or store terminal or kiosk T, based on the coupons currently available to the customer as per the central database or as per the coupons or promotions for the second store or based upon information related to the customer's credit card or object account number stored in the second terminal T or processor 22 database installed in the second store, wherein the first coupon may not even be available, under the customer's credit card account, if it was a one per customer-only or one time type coupon or promotion (col. 5: 45 to col. 6:10; col. 10: 17-61; col. 19: 51 to col. 20: 5; col. 29: 66 to col. 30: 20).

Lemon does not explicitly disclose digitally watermarking an object, such as a coffee cup, and decoding the information therefrom (here, the decoding process is clearly expected in reading the watermarked object).

However, electronically or digitally watermarking an object or document to ensure their

authenticity to thereby identify or detect any copies of the object or document is old and well known in the art. Indeed, a watermark is a mark, which is difficult to reproduce and it is laid over some other existing information for the purpose of identification and authenticity of the underlying information (e.g. visible watermark on US currency). Further, electronic or digital watermark is invisible or imperceptible to the user. Therefore, electronically or digitally watermarking an object (credit card) or document makes it impossible to reproduce the object since the photocopies of the said object will not contain the invisible or imperceptible watermark (mark) ("Official Notice").

Furthermore, watermarking a coffee cup or a jacket for a coffee cup (placing the watermark on a coffee cup or jacket for a coffee cup) is a matter of choice or desires, which does not directly affect the functionality or the utility of the system and in the end produces the same result. Technically speaking, the watermark can be placed on any article of commerce or product (including a credit card) without affecting the functionality of the system (This fact is supported by the specification).

Therefore, an ordinary skilled artisan would have been motivated at the time of the invention to incorporate the above disclosure ("Official Notice") into the coupon distribution system of Lemon so as to create a digital watermark image and then embed the watermarked image, containing customer's information used to assist in authenticating the credit card and/or the credit card holder, into the customer's credit card or imprint an invisible digital mark on the customer's credit card and to use a watermark reader, coupled to a terminal T operable to decode the digital watermark sensed or detected from the customer's credit card when the customer presents the digitally watermarked credit

card to the watermark reader to activate the terminal T and receive a first coupon at a first location and a second and different coupon at a second location when the same credit card is sensed or read by a second watermark reader device, wherein the second coupon is different from the first coupon, thereby adding an extra layer of security or protection to the coupon distribution and redemption system by completely eliminating the possibility that a malicious customer might duplicate a credit card (making credit card copies) and attempt to access a terminal T at a participating location to print one or more coupons associated with the credit card account for the digital watermark cannot be reproduced, while providing full control over the distribution and redemption of the coupons to the manufacturer who cannot be duped by unscrupulous customers using phony and unregistered credit cards, as identification means, to access the system (i.e. credit cards without an embedded digital watermark).

#### (10) Response to Argument

First, Appellant's arguments related to the 35 USC 102 Rejection are moot since the Examiner has herein withdrawn the Rejection.

Second, in general and as per claims 2 and 5-7, Lemon teaches, contrary to the Appellant's findings, a coupon distribution and redemption system wherein a customer enters a participating store having a terminal T, with a reader or Activator A coupled thereto, and uses an identification means such as a typical credit card to activate or access via the Activator A the coupon dispenser or terminal T (first location) to view or select at least one coupon. Upon detecting or sensing the presence of the credit card in its circuitry, Activator A reads the data encoded on magnetic tape or strip imprinted on the consumer's

inserted <u>credit card.</u> Then, Activator A provides a signal to activate terminal T to the coupon-dispensing mode. Using a <u>credit card</u> as an activator or identification means provides the informational capability to limit the number of unauthorized transactions or printed coupons, utilizing the same credit card at the same terminal T, and further prevents children from activating the machine or coupon dispenser T. Subsequently, terminal T, at the first location, retrieves and displays only coupons currently available to the identified consumer, identified via the credit card having a unique account number or identifier. Here, the customer can select and print at least one coupon via a printer connected to the terminal T (presenting the customer's credit card or object to a first reader device at a first location or terminal T installed at a first store and triggering a first response or issue a first coupon to the customer).

Further, upon activation, terminal T determines whether the same <u>credit card account</u> number has been used within the last week or other pre-designated period by comparing the present <u>credit card</u> number with those stored in memory or database coupled to processor 22 of the terminal T. If so, microcomputer 22 permits only those coupons still available for selection by that particular customer <u>account</u> number to be displayed. If, for example, the manufacturer has prescribed a one per customer limit for a coupon, and that coupon has been previously issued to the customer under the same credit card <u>account</u> number, then the coupon will not be displayed. Furthermore, even if the particular credit <u>account</u> number has no selection history and if the maximum number of a particular coupon either collectively or on a store-by-store basis has been issued, that coupon will no longer be displayed. In this fashion, a manufacturer is provided with much more control over the maximum redemption liability. It should be recognized here that the customer comes to the (first) store and presents his credit card or

object to a first reader device or Activator A, coupled to a first terminal T or kiosk, which senses the card and reads the customer's account number and issues a first response or a first coupon accordingly. Then the customer takes the issued or printed coupon to the cashier at the first store and uses the same object or credit card to identify himself, during the transaction, to thereby trigger a second response or a redemption of the coupon and/or to simply pay for the transaction, which involves the redemption of the coupon upon acquiring or purchasing the required product (sensing the same object at the first store checkout or cash register reader or second reader and triggering a second response or a redemption process or a payment process).

It should further be understood that the customer can subsequently take the same object or credit card to a second store or POS and present it to a second reader device or Activator A, coupled to a second and different terminal T or kiosk, which senses the card and reads the customer's account number and issues a second different response or a second different coupon, different from the first response or the first coupon issued at the first store or store terminal or kiosk T, based on the coupons currently available to the customer as per the central database or as per the coupons or promotions for the second store or based upon information related to the customer's credit card or object account number stored in the second terminal T or processor 22 database installed in the second store, wherein the first coupon may not even be available (since the coupon is store specific), under the customer's credit card account, if it was a one per customer-only or one time type coupon or promotion.

In short, Lemon discloses using by a customer an object or a credit card (as an

identification means) at a first store terminal or Kiosk (first location) to trigger a first response or obtain at least one specific printed coupon and wherein the customer takes the printed coupon to the cash register or checkout station (second location) at the same store for redemption and the same object or credit card is now used, as a payment instrument, to trigger a second response (different from the first response) or to pay for the transaction upon purchasing the required product related to the presented coupon. Furthermore, the customer can subsequent (at a time t2) take the same object or credit card to a second, remote and (different) distinct second store to trigger a second and different response or to obtain a second coupon from a second terminal or kiosk T installed within the second store, wherein the second coupon is different from the first coupon since the coupon is store specific or varies with the location of the terminal or coupon dispenser T.

(Col. 5: 45 to col. 6:10; col. 10: 17-61; col. 19: 51 to col. 20: 5; col. 29: 66 to col. 30: 20).

Here, Lemon does not explicitly disclose digitally watermarking an object, such as a coffee cup or coffee jacket, and decoding the information therefrom (here, the decoding process is clearly expected in reading the watermarked object).

However, electronically or digitally watermarking an object or document to ensure their authenticity to thereby identify or detect any copies of the object or document is old and well known in the art. Indeed, a watermark is a mark, which is difficult to reproduce and it is laid over some other existing information for the purpose of identification and

authenticity of the underlying information (e.g. visible watermark on US currency). Further, electronic or digital watermark is invisible or imperceptible to the user. Therefore, electronically or digitally watermarking an object (credit card) or document makes it impossible to reproduce the object since the photocopies of the said object will not contain the invisible or imperceptible watermark (mark) ("Official Notice").

Furthermore, contrary to the Appellant's contention, watermarking a coffee cup or a coffee cup jacket, a book cover, a driver's license, a dollar bill, etc., (or placing the watermark on a coffee cup or jacket for a coffee cup, a book cover, a driver's license, a dollar bill....) is a matter of choice or desires, design specification or a matter of convenience, which does not directly affect or impact the functionality or the utility of the system and in the end produces the same result. Technically speaking, the watermark can be placed on any article of commerce or product (including a credit card) without affecting the functionality of the system, which is operable to produce a first response at a first location and a second and different response at a second location.

Therefore, an ordinary skilled artisan would have been motivated at the time of the invention to incorporate the above disclosure ("Official Notice") into the coupon distribution system of Lemon so as to create a digital watermark image and then embed the watermarked image, containing customer's information used to assist in authenticating the credit card and/or the credit card holder, into the customer's credit card or imprint an invisible digital mark on the customer's credit card and to use a watermark reader, coupled to a terminal T operable to decode the digital watermark sensed or detected from the customer's credit card when the customer presents the digitally watermarked credit card to the watermark reader to activate the terminal T

Art Unit: 3622

and receive a first coupon at a first location and a second and different coupon at a second location when the same credit card is sensed or read by a second watermark reader device, wherein the second coupon is different from the first coupon, thereby adding an extra layer of security or protection to the coupon distribution and redemption system by completely eliminating the possibility that a malicious customer might duplicate a credit card (making credit card copies) and attempt to access a terminal T at a participating location to print one or more coupons associated with the credit card account for the digital watermark cannot be reproduced, while providing full control over the distribution and redemption of the coupons to the manufacturer who cannot be duped by unscrupulous customers using phony and unregistered credit cards, as identification means to access, the system (i.e. credit cards without an embedded digital watermark).

Here, contrary to the Appellant's remarks, the limitations of the claims, especially of claims 2, 5 and 7, were properly interpreted and were given full patentable weight, as seen above, and thus, the Examiner has established a prima facie case and the obviousness rejection is said to be proper and well within the level of skills of an ordinary artisan. Moreover, regarding claim 7, it is clear that the watermark can be placed on any article of commerce, such as a dollar bill, a book cover, a driver's license, etc., and the end result will be the same as shown above (as further supported in the specification). This conclusion is well within the level of skills of an ordinary artisan at the time of the invention. Further, the Appellant has failed to clearly demonstrate in the specification what the advantages or disadvantages of placing the watermark on a coffee cup instead of a jacket for a coffee cup are. Additionally, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon some kind of hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

Art Unit: 3622

See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Third of all, regarding the 103 Rejection, it appears that the Appellant disagrees with the Examiner's taking of "Official Notice" for certain aspects of the claimed invention and herein request a written document in support. However, the Appellant has failed to explicitly point out the deficiencies in the "Official Notice". In other words, the Appellant has failed to demonstrate whether or not the Examiner's assertion are factually inaccurate based on printed documents supplied by the Appellant or based on the Appellant's own background in the art. The fact that a printed material is not readily available during examination of an Application does not necessarily imply that the claimed subject matter is patentable. However, having said that and contrary to the Appellant's conclusion, the "Official Notice" is proper for the materials or facts recited therein are well known and capable of instant and unquestionable demonstration (MPEP 2144.03). For instance, the "Official Notice" recites that digital watermark is placed on US currency such as a dollar bill, which is well known and capable of instant and unquestionable demonstration. Here, the dollar bill is the evidence or the proof to support the "Official Notice". Further, the Appellant has admitted in the background section of the specification (page 1: 29-30) that many watermarked techniques are well known in the art. Here, the Examiner needs no evidence to support what is said to be well known by the Appellant's own admissions. Hence, the "Official Notice" is well supported and the obviousness rejection is proper.

Therefore, the Appellant's request for allowance or withdrawal of the last Office Action has been fully considered and respectfully denied in view of the foregoing response since the

Art Unit: 3622

Appellant's arguments as herein presented are not plausible and thus, the rejections should be sustained.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

JDJ

Conferees:

Eric Stamber (SPE)

Yehdega Rhetta (XP)